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EXAMINER	
MOORE, WILLIAM W	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,018	KOTTWITZ ET AL.	
	Examiner	Art Unit	
	William W. Moore	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *47-68,71 and 73-78* is/are pending in the application.

4a) Of the above claim(s) *49,51 and 52* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *47,48,53-68,71 and 73-78* is/are rejected.

7)☒ Claim(s) *50* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Applicant's claim in the Declaration of Inventorship filed 12 October 2004, as well as in an amendment to the first page of the specification filed 15 December 2004, to priority under 35 U.S.C. § 119 of the 7 August 2001 filing date of the German patent application DE 101 38 753, and its successor International patent application PCT/EP02/08391 filed 27 July 2002, is hereby acknowledged.

Information Disclosure Statement

No Information Disclosure Statement [IDS] has yet been filed in the instant application and Applicant is invited to do so in responding to this communication, including any documents cited in the specification and/or PCT Search Report that are not made of record with the PTO Form-892 that accompanies this communication.

Preliminary Amendments

Applicant's Amendment filed 15 December 2004 has been entered, canceling claims 1-46 and providing the new claims 47-78. Applicant's Supplemental Amendment filed 13 November 2006, canceling claims 69, 70, and 72 and amending claims 65, 66, 68, 71 and 73-78 has been entered, thus claims 47-68, 71 and 73-78 are pending herein as presented in the election made on 20 February 2007.

Election

Applicant's election with traverse in the reply filed 20 February 2007 of the invention of Group 4, comprising claims 47, 50, 53-68, 71 and 73-78 describing an "agent" comprising an amylolytic fusion protein, and methods of use thereof, wherein the sequence from position 78 through position 481 of SEQ ID NO:2 is fused to position 76 in SEQ ID NO:4, is acknowledged. The traversal is on the grounds that MPEP 803.04 permits consideration of up to ten nucleotide sequences in an application. This is not found persuasive because the pending claims herein are drawn to cleaning agents, not polynucleotides. The requirement is still deemed proper and is therefore made FINAL. Because no prior art was found relating to the elected invention construed in light of the specification, claim 48 was not withdrawn from consideration herein. Claims 49, 51, and 52 are withdrawn from consideration as drawn to a non-elected invention and claims 47, 50, 53-68, 71 and 73-78 are examined herein to the extent that they describe the elected invention.

Objection to the Specification

The disclosure is objected to because it contains several embedded hyperlinks and/or other form of browser-executable code. See, e.g., pages 18 and 19. Applicant is required to delete these, and other, occurrences of embedded hyperlinks and/or other forms of browser-executable code wherever they occur within the specification. See MPEP § 608.01.

Objection to the Specification

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the following reason(s). In particular, the discussion at page 6 contains references to positions identifiable in, at least, an amino acid sequence of SEQ IDs NOs:2 or 4, yet is not accompanied by an identification of either sequence identification number. See, e.g., page 8 at lines 21-35 where the discussion of positions identifies them as corresponding to particular positions in SEQ ID NO:4. Applicant's attention is directed to 37 CFR 1.821, which states:

> (d) Where the description or claims of a patent application discuss a sequence that is set forth in the "Sequence Listing" in accordance with paragraph (c) of this section, reference must be made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" in the text of the description or claims, even if the sequence is also embedded in the text of the description or claims of the patent application.

Thus, each time that reference is made to an amylase amino acid position identifiable in, at least, the amino acid sequences of SEQ IDs NOs:2 or 4 in the specification or in the claims, the reference should be accompanied by the sequence identifier, "SEQ ID NO:2" or "SEQ ID NO:4".

Claim Objections

Claims 65, 67, and 68 are objected to because of the following informalities: Claim 65 erroneously refers back to an "active amylolytic protein . . . of claim 47", and claim 67 depending from claim 65 also recites "amylolytic protein". But claim 47 instead describes an "agent", which is disclosed to be a composition. Appropriate correction is required, see, e.g., claims 66 and 71 which properly refer back to an "agent of claim 47".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 47, 53-68, 71 and 73-78 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. 64, 67,

Claims 48 and 73 are indefinite because, even though both twice recite, "partial sequence identical to that of", the recitations of the dependent claims 54, 55, 65, 67, 74-76, and 78 make it uncertain whether or not these independent claims are actually intended to require any identity with either of the amino acid sequences disclosed for the mature α-amylases of *B. licheniformis* and *B. amyloliqufaciens*. The artisan and the public seeking to ascertain the metes and bounds of the intended subject matter cannot determine whether claims 48 and 73 require particular starting sequences for fusion partners contributing to a hybrid amylase or only require some form of identification with the amino acid sequence of SEQ ID NO:4, the nature of which is further uncertain in view of the recitations of their dependent claims. Claims 53-68, 71, and 74-78 are included in this rejection because they depend from claims 48 and 73 but fail to clarify their indefinite descriptions.

Claims 54 and 76 are indefinite because the terms chimeric and hybrid are synonymous and because claim 54 recites, "[a]n agent . . . comprising . . . **or** an amylolytic chimeric protein" and claim 76 recites "the hybrid amylase . . . **or** represents an amylolytic chimeric protein" (emphases supplied). An agent of claim 47, from which claim 54 depends, already comprises a chimeric amylase, and a method of claim 73, from which claim 76 depends, already utilizes a chimeric amylase, thus the artisan and the public seeking to ascertain the metes and bounds of the intended subject matter cannot determine what further distinction is provided when claims that already require a hybrid amylase then require another, undefined, hybrid, amylase. Furthermore, a hybrid protein is a protein that can also be construed to be a protein "obtained by an insertion mutation", or as "ha[ving an] insertion[ ]", insofar as one fusion partner is inserted next to another fusion partner, thus the first alternatives stated in both claims 54 and 76 are also indefinite. Amending both claims (i) to more particularly identify (an) amino acid insertion(s) within either or both fusion partners, see, e.g., claim 75, and (ii) to delete alternative recitations of an unspecified "amylolytic chimeric protein" will overcome this aspect of the rejection.

Claim 68 is indefinite in requiring that a method of use of a "cleaning agent", which is disclosed to be a composition, such as a detergent composition, comprising a hybrid amylase and other compounds construed according to, e.g., the paragraph spanning pages 9 and 10 or the specification, "with at least one other cleaning-active ingredient **or** active ingredient" (emphases supplied). The artisan and the public seeking to ascertain the metes and bounds of the intended subject matter cannot determine what, if any, further distinction is indicated by claims already requiring a cleaning composition that further require some other, undefined, component of a cleaning composition. Either amending the claim (a) to state a set of different classes of ingredients or a single class of ingredient, (b) to state a set or particular ingredients or

a single ingredient, or (c) deleting claim 68, will overcome this aspect of the rejection. Note that stating a class of ingredients in the alternative with a particular ingredient within the class will also render the claim indefinite for the reasons set forth in the final paragraph of this statement.

Claim 63 is indefinite for several reasons, one of which is discussed herein and the other of which is discussed the following paragraph. Here the recitation, "protein present or at least one of the enzymes present or at least one of the other components present is, either individually or together with other components" is rejected because the "protein" first referred to is itself an enzyme and both it and other enzymes are all "components", thus the artisan and the public seeking to ascertain the metes and bounds of the intended subject matter cannot determine the level of organization of the "components" – both separately and collectively – in the "liquid, gel, or paste form" of the "overall" agent in the preceding clause of claim 63 when "present in" one of the final "form[s]" in the terminal clause of claim 63. Resolving this issue of indefinite description requires a joint resolution of the range-within-a-range issue explained in the following paragraph that also discusses claim 63.

Claims 56-58, 60-64, 67, 74, and 75 are indefinite because each states a narrower range of embodiments/limitations within a broader range of embodiments/limitations in the same claim. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 56 states the broad recitation, "from 0.000001 percent by weight to 5% by weight", and the claim then states "[from] 0.00001 [by weight] to 3% by weight", which is the narrower statement of the range. Similarly, claim 57 states the broad recitation, "one or more other amylolytic proteins", and the claim then states "**in particular** α-amylases" (emphasis supplied), which is the narrower statement of the limitation. Similarly, claim 58 states the broad recitation, "comprising other enzymes", and the claim then states "one or more proteases, lipases, β-glucanases or cellulases", which is the narrower statement of the limitation. Claim 60 likewise states the broad recitation, "two different

solid components", and the claim then states "powders, granules, or extrudates", where each kind of component constitutes a narrower statement of the limitation where each is a kind of solid component. Similarly, claim 61 states the broad recitation, "at least two solid phases bonded together are present", and the claim then states "in particular after a joint compacting step", which is the narrower statement of the limitation where it states a species of a genus of bonded phases. Similarly, claim 62 states the broad recitation, "at least one of the phases comprises an amylase-sensitive material", and the claim then states two different kinds of narrower statement of the range/limitation", (1) "starch", which is a particular kind of amylase-sensitive material, and (2) "at least partly, surrounded by or coated with", since this constitutes a statement of a species within a genus of preparations of components in a phase. In addition to the reasons set forth in the preceding paragraph, claim 63 is further indefinite in stating a broad recitation, "in encapsulated form", where the claim then states "microcapsules or microcapsules made of an amylase-sensitive material", which is the narrower statement of the limitation because a "microcapsule[ ]" is a sub-genus of an "encapsulated form", and a "microcapsule[ ] made of an amylase-sensitive material" is itself, in turn, a sub-sub-genus of a "microcapsule[ ]". Similarly, claim 64 first states a broad recitation "the agent modifies", and the claim then states "**in particular** stabilizes" (emphasis supplied), which is the narrower statement of the limitation and claim 64 also states a different kind of broad recitation, "modifies . . . activity", and then states "increases the contribution to the washing or cleaning performance" which is the narrower statement of the limitation since an increase of one kind of activity is a subgenus of modification of generic activity.

Claim 67 is noteworthy in setting forth consecutive recitations of broader ranges followed by narrower ranges of amounts of a chimeric amylase within a composition: first, the broad statement, "from 0.01 mg to 400 mg", is followed by the narrower statement, "[from] 0.02 mg to 200 mg", then this statement is followed by the even narrower statement, "[from] 0.2 to 100mg". Claim 74 likewise states a first broad recitation "no more than 5 contiguous amino acids", which is followed by the narrower statement, no more than 3 contiguous amino acids", which is in turn followed by the even narrower statement, "or only one amino acid". Similarly, claim 75 states the broad recitation "at least one position", and the claim then recites "1, 2, or 3 of positions", which is the narrower statement of the limitation. In this national forum, the presentation of consecutive, dependent, claims will resolve an indefinite description arising from statements in the same claim of a narrower range of limitations within a broader range of limitations.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 47, 53-68, 71, and 73-78 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The broadest possible construction is given to claims 47 and 73 for the purposes of this rejection because, even though both claims refer to "partial sequence(s) identical to" their dependent claims indicate that no particular identity to a disclosed amino acid sequence is required in the amino acid sequence of either fusion partner joined in a hybrid α-amylase. The specification fails to exemplify or describe the discovery or preparation of the genus of chimeric "amylolytic proteins" having fusion loci that diverge from the disclosed *B. licheniformis* and *B. amyloliqufaciens* hybrid α-amylase fusion loci determined by homology with the amino acid sequence of the mature α-amylase amino acid sequence set forth in SEQ ID NO:4 herein according to the process of "homoligization", and description of "homology", set forth at pages 15-17 of the specification. It is agreed that the specification demonstrates an adequate degree of amino acid sequence identity shared by the mature *B. licheniformis* and *B. amyloliqufaciens* α-amylases to establish Applicant's possession of the subject matters of the elected claim 50 not subject to this rejection. The specification does not, however, provide any indication as to how the points of fusion indicated in claim 47 can be determined for any and all amylolytic enzymes generally or for α-amylases in general. This is particularly the case where α-amylases of non-bacillus gram positive microorganisms have relative gaps in their amino acid sequences that render uncertain the identification of the necessary positions for fusion in either or both of the amino acid sequences of the mature *B. licheniformis* and *B. amyloliqufaciens* α-amylases set forth in the instant application. See the UniProt 8.4 amino acid sequence alignment results with SEQ ID NO:4 present in SCORE for this application. The instant specification provides no indication that Applicant had determined the extent of sequence "homology" necessary to permit the preparation of a particular genus of hybrid amylases of the rejected claims. "While one does not need to have carried out one's invention before filing a patent application, one does need to be able to describe that invention with particularity" to satisfy the description requirement of the first paragraph of 35 U.S.C. § 112. *Fiers v. Revel v. Sugano*, 25 USPQ2d 1601, 1605 (Fed. Cir. 1993). The "test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the

Inventor had possession at that time of the . . . claimed subject matter", *In re Kaslow*, 217 USPQ 1089, 1096 (Fed. Cir. 1983), and, in 2001, the USPTO issued Guidelines governing its analysis of compliance with the written description requirement. In these Guidelines, the USPTO states that an applicant may comply with the written description requirement by "show[ing] that an Invention is complete by disclosure of sufficiently detailed, relevant identifying characteristics . . . , i.e., complete or partial structure, other physical and/or chemical properties, function characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics." **Guidelines**, 66 Fed. Reg. 1099 at 1106 (5 January 2001). The Federal Circuit adopted the USPTO's standard for determining compliance with the written description requirement In *Enzo Biochem Inc. v. Gen-Probe Inc.*, 63 USPQ2d 1609 (Fed. Cir. 2002). The specification does not disclose the design of the very broad genus of α-amylases, and methods of use thereof, embraced by claims 47, 53-68, 71, and 73-78 and does not otherwise disclose or suggest the nature or source of any of the generic α-amylases that meet the uncertain limitations of the claims.

Claims 54, 55, 65, 67, 74-76, and 78 are further rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This separate rejection is made in the event that Applicant establishes some narrower construction for the subject matters of claims 48 and 73. The specification fails to exemplify or describe the discovery or preparation of the genus of α-amylases diverging from a fusion of the mature *B. licheniformis* and *B. amyloliqufaciens* α-amylases by amino acid substitutions, insertions, and deletions, in any combination or pattern, at any position(s) that might be identified by correspondence with the amino acid sequence of SEQ ID NO:4. Even claim 75, which in the alternative identifies three particular positions for amino acid substitutions by correspondence with the amino acid sequence of SEQ ID NO:4, also describes another embodiment, "at least one position", which permits unlimited numbers of amino acid substitutions in any combination or pattern in an α-amylase fusion protein. Thus, even if the independent claims 48 and 73 were amended to remove each reference to a "homologous position" and to require fusions of only two, particular, fusion partners, the scope of the genus set forth in the dependent claims would render the resulting fusions indistinguishable from fusions prepared with any conceivable native amylase, or some other polypeptide. "While one does not need to have carried out one's invention before filing a patent application, one does need to be able to describe that invention with particularity" to satisfy the description requirement of the first paragraph of 35 U.S.C. § 112. *Fiers v. Revel v. Sugano*, 25 USPQ2d

1601, 1605 (Fed. Cir. 1993). The specification does not disclose the design of the very broad genus of α-amylases, and methods of use thereof, embraced by the dependent claims 54, 55, 65, 67, 74-76, and 78 and does not otherwise disclose or suggest the nature or source of any of the generic α-amylases that meet the uncertain limitations of the claims.

Claims 47, 53-68, 71, and 73-78 are rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for the preparation of a hybrid amylase comprising a first fusion partner wherein the amino acid sequence is identical to that set forth in SEQ ID NO:2 from either its amino terminus or carboxyl terminus up to a point of fusion identified in claim 47 as well as a second fusion partner having an amino acid sequence identical to that set forth in SEQ ID NO:4 from either its amino terminus or carboxyl terminus up to a point of fusion identified in claim 47, does not reasonably provide enablement for the preparation of fusion polypeptides wherein (a) fusion partner has an amino acid sequence that diverges form either SEQ ID NO:2 or SEQ ID NO:4 beyond the extent of 95% amino acid sequence identity. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The rejected claims contemplate arbitrary amino acid substitutions, additions or deletions in a claimed, generic, "amylolytic" protein at an indeterminate number of the amino acid positions in the amino acid sequences of, at least, the mature *B. licheniformis* and *B. amyloliqufaciens* α-amylases disclosed in the specification. This rejection is stated under the first paragraph of the statute because the specification cannot support introduction of an uncertain number of amino acid alterations in the amino acid sequences of SEQ IDs NOs:2 or 4, where such amino acid insertions, deletions, or substitutions may occur anywhere, in any combination or in any pattern yet permit the recombinant expression of an active amylase. Mere sequence perturbation cannot enable the design and preparation of a myriad of divergent amylases and provide the public with an amylasethat retains its native function as demonstrated by the publication of Seffernick et al., 2001, **Journal of Bacteriology**, Vol. 183, No. 8, pages 2405-2410, made of record herewith, who teach that the alteration of 9 amino acids in a sequence of 475 amino acids, a scant 2% of the native amino acid positions, in a deaminase will suffice to alter its substrate specificity and require it to catalyze different reactions even though, p. 2409, these alterations do not at all alter its tertiary structure and are spread throughout its primary structure.

It is well settled that 35 U.S.C. § 112, first paragraph, requires that a disclosure be sufficiently enabling to allow one of skill in the art to practice the invention as claimed without undue experimentation and that unpredictability in an attempt to practice a claimed invention is a significant factor supporting a rejection under 35 U.S.C. §112, first paragraph, for non-enablement. See, *In re Wands*, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) (discussing eight

factors relevant to the analysis of enablement). Applying the factors discussed in *Wands* to Applicant's disclosure, it is apparent that:

a) the specification lacks adequate, specific, guidance for altering the amino acid sequences of enzymes of SEQ ID NOs:2 and 4 to the extent permitted by the claims,

b) the specification lacks working examples wherein either of SEQ ID NOs:2 and 4 are altered to the extent permitted by the claims, and

c) in view of the prior art publications of record herein, the state of the art and level of skill in the art do not support such alteration.

Thus the scope of subject matter embraced by the claims taken in light of the specification, with which the various alternative embodiments of the elected claims must be construed, is unsupported by the present specification even if taken in combination with teachings available in the prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 USC § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 47, 48, 50,53-68, 71 and 73-78 are rejected under 35 USC § 102(b) as being anticipated by Mitchinson et al., US 5,736,499, who disclose a modified *B. licheniformis* amylase amino acid sequence comprising M15T, H133Y, S148N ,N188S, A209V and A379S amino acid substitutions which, with respect to SEQ ID NO:4 herein, comprises a modified amino terminal 17-amino acid region wherein there is at least one amino acid substitution in the first 17 amino acids relative to SEQ ID NO:2 herein (at the first three positions) and that has a relative point of fusion with the amino acid sequence of SEQ ID NO:4 herein located within a region from seven amino acids upstream of position 17 in SEQ ID NO:4 and that further comprises relative amino acid substitutions at the positions 132 (Q>L) and 320 (A.S) of SEQ ID NO:4. In view of the descriptions at page 80, lines 24-33, and page 81, lines 9-15, of the specification, as well as the recitations of claims 53-55, 75 and 76, the modified amylase of Mitchinson et al., and cleaning compositions comprising same discussed at cols. 19-22, as well as cols. 24 and 25, of Mitchinson et al., the disclosure of Mitchinson et al. anticipates the subject matters of claims 47, 48, 50,53-68, 71 and 73-78 herein.

Conclusion

Claim 50 describes subject matter that is free of the prior art made of record herewith but is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is 571.272.0933 and whose FAX number is 571.273.0933. The examiner can normally be reached Monday through Friday between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisory Primary Examiner, Dr. Kathleen Kerr Bragdon, can be reached at 571.272.0931. The official FAX number for all communications for the organization where this application or proceeding is assigned is 571.273.8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571.272.1600.

/Nashed/
Nashaat T. Nashed, Ph. D.
Primary Examiner
Art Unit 1656

William W. Moore
14 September 2007